

Work Order ID 62236

Wednesday, September 22, 2010 3:36:18 PM



Page 1

Item ID: D3564-11

Accept



Setup Start



Revision ID:

Item Name: Wearshoe

Stop



Start Date: 9/22/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 9/29/2010 Req'd Qty: 12.00



Customer:

Reference:

Approvals:

Process Plan:

M

Date:

10-9-29

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3564

Rev D

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3564 ***** (D3564-1F) ***** □ Dwg Rev: *D* □ Prog

364. 062

Rev: *D* □ 2-Deburr if necessary

10-9-29

(14)

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

10-9-29

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

Solorbe

(14)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 62236

Wednesday, September 22, 2010 3:36:18 PM

Page 3

Item ID: D3564-11

Accept

Revision ID:

Item Name: Wearshoe

Start Date: 9/22/2010 Start Qty: 12.00

Required Date: 9/29/2010 Req'd Qty: 12.00


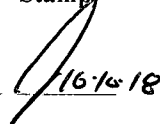

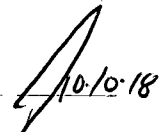


Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 0.00				14			 16/10/18
170  QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				14			 10/10/18
180  Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 <i>M112588</i> Memo START TIME: <i>7:40</i> <i>3:00</i> FINISH TIME: <i>8:10</i>	0.00 0.00							<i>OK 10-10-19</i> 

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 62236

Wednesday, September 22, 2010 3:36:18 PM



Page 4

Item ID: D3564-11

Accept



Setup Start



Revision ID:

Item Name: Wearshoe

Stop



Start Date: 9/22/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 9/29/2010 Req'd Qty: 12.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190



QC

Quality Control

QC3- Inspect Part Finish

0.00

=> H L 10/10/19

V14

q

Memo

0.00

200



Packaging

Packaging

Identify as per dwg & Stock Location: FP-19

0.00

=> H L 10/10/19

V14

q

Memo

0.00

210



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

0.00

Memo

10/10/20

YMF
10-10-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, September 22, 2010 3:36:23 PM

Page 1

Work Order ID: 62236



Parent Item: D3564-11



Parent Item Name: Wearshoe



Start Date: 9/22/2010

Required Date: 9/29/2010

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A New Issue 07-03-08 ec
IPP Rev:B As per Rev C 07-07-09 JLM
IPP Rev:C As per Rev D 07-09-09 JLM Verified By:EC
IPP Rev:D Comments revised on Step 5, 6 per B44656 09-02-06 KJ
Verified By:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA  304/316 Sheet .063		Purchased	No			100	sf	160.8400	1.41	17.81053	19.8		
											1310-9-29		

Location

Loc Qty

Loc Code

MAT

146.7

111323

0

115688

146.7

MAT20

14.14

115440

14.14

115688

(14)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	42236
Description: Wearshoe		Part Number:	D3564-11
Inspection Dwg: D3564 Rev: D		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.227	+/-0.010	3.225	✓		✓ 1802	
2.432	+/-0.010	2.439	✓		✓	
2.50	+/-0.030	2.50	✓		✓	
6.000	+/-0.010	6.000	✓		✓	
12.104	+/-0.010	12.104	✓		T 1801	
18.000	+/-0.010	18.000	✓		T	
18.00	+/-0.030	18.00	✓		T	
9.00	+/-0.030	9.00	✓		T	
11.50	+/-0.030	11.50	✓		T	
0.300 x 0.300	+/-0.010	300x300	✓		✓	
Ø0.188	+0.005/-0.001	.190	✓		✓	
R0.375	+/-0.010	.375	✓		R.G.	
0.063	+/-0.010	.059	✓		✓	

Measured by: IB	Audited by: S	Prototype Approval:	N/A
Date: 10-9-29	Date: 10/09/09	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.09.06	New Issue	KJ/JLM	
B	07.11.23	Dwg Rev updated	KJ/EC/DD	DA

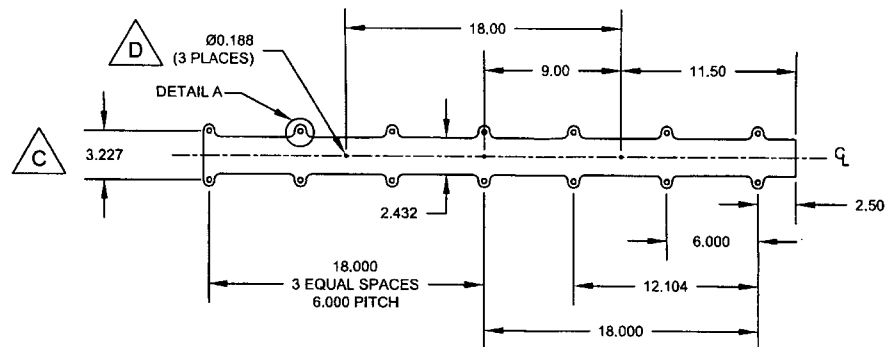
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

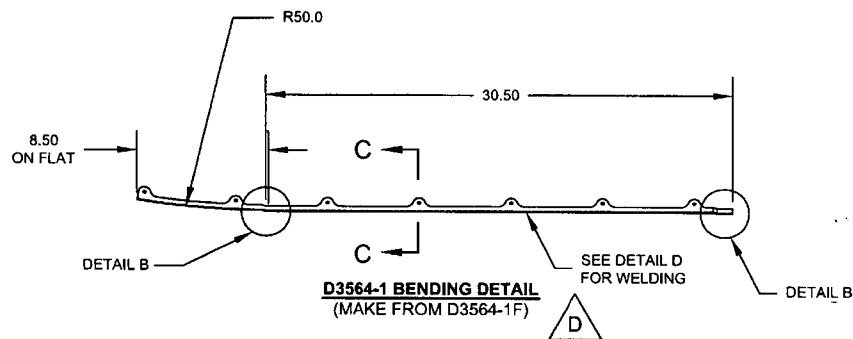


D3564-1F FLAT PATTERN

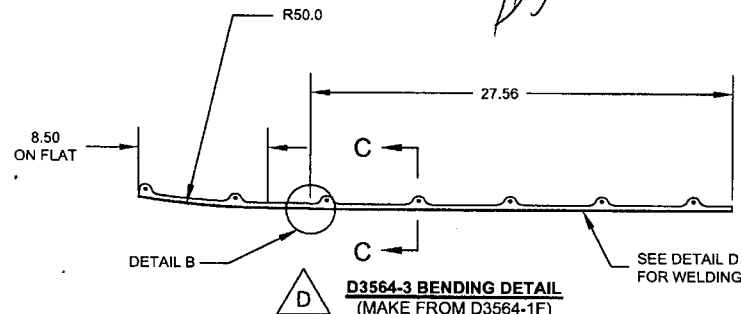
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 42236
B/10-9-23

RELEASED

07.09.04 #



D3564-1 BENDING DETAIL
(MAKE FROM D3564-1F)



D3564-3 BENDING DETAIL
(MAKE FROM D3564-1F)

D3564-1/-3/-5/-7/-9/-11/-13/-15 WEARPLATE NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK)
(REF DART MATERIAL SPEC M304S16GA)
- 2) FINISH: POWDER COAT GREY SANDEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: SEE TABLE IN ZONE A3
- 8) WELD PER DART QSI 004
- 9) SEE PG 3 FOR SECTIONS AND DETAILS
- 10) PARTS ARE SYMMETRIC ABOUT Q

WEIGHTS:	
D3564-1	1.85 lbs
D3564-3	1.85 lbs
D3564-5	1.93 lbs
D3564-7	1.26 lbs
D3564-9	1.85 lbs
D3564-11	1.85 lbs
D3564-13	0.38 lbs
D3564-15	0.80 lbs

D	UPDATE DRAWING TEMPLATE; CHANGE ALL (TYP X PLS) TO (X PLACES); PG1 A8: UPDATE NOTES; PG1 A8, PG3 B5,C5: ADD D3564-15; PG1 B6,B3: D3564-1/-3 WAS ONE FIGURE; PG2 A7,A3: D3564-9/-11 WAS ONE FIGURE; PG2 A7,A3: D3564-9/-11 WAS ON PG1; PG3 B8,C8: D3564-13 WAS ON PG2; PG3 D2: WELDING DETAIL WAS ON PG1 PG3 A5,7,B2: RELOCATE DETAILS AND SECTION; PG3 A5,7,B2: INCREASE DETAIL AND SECTION SIZE	CB	07.08.21
C	MOVE TAB OUTBOARD, DETAIL A	PH	07.04.17
B	ADD AMS 5513 AND AMS 5524	PH	07.03.20
A	NEW ISSUE	PH	06.12.18
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CB		
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 1 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:8
DATE	07.08.21	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

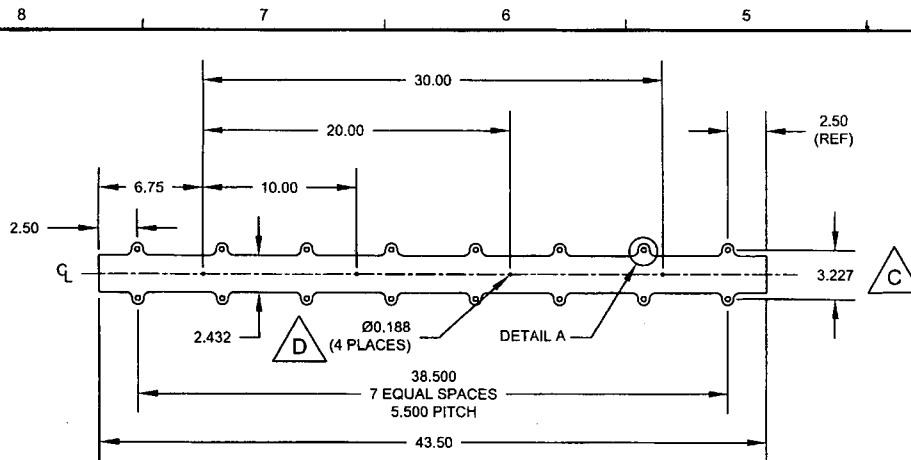
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

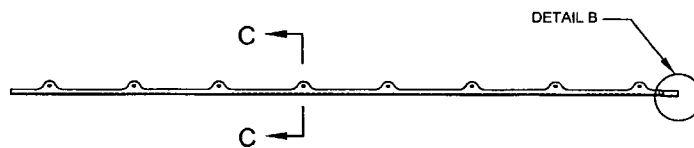
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

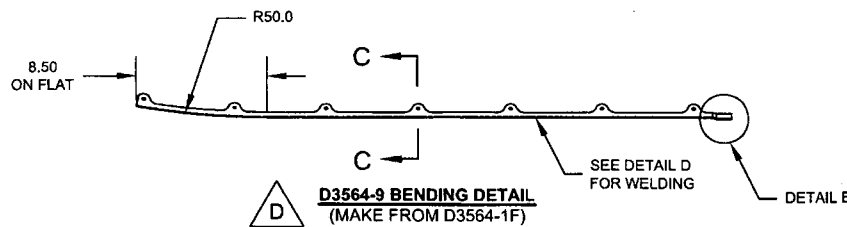
NOTE: Date & initial all entries



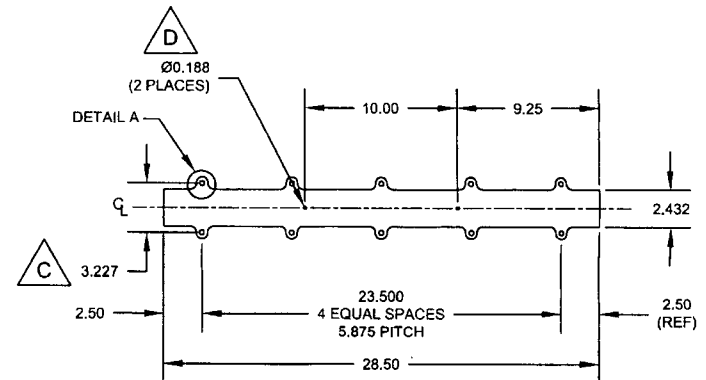
D3564-5F FLAT PATTERN



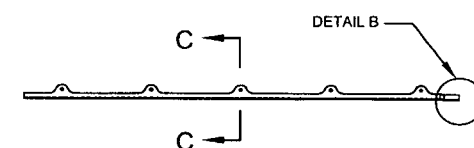
D3564-5 BENDING DETAIL
(MAKE D3564-5 FROM D3564-5F)



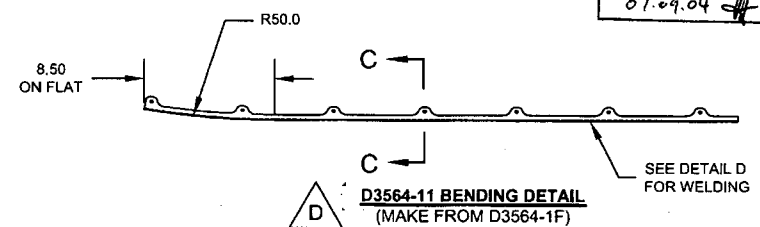
D3564-9 BENDING DETAIL
(MAKE FROM D3564-1F)



D3564-7F FLAT PATTERN



D3564-7 BENDING DETAIL
(MAKE D3564-7 FROM D3564-7F)



D3564-11 BENDING DETAIL
(MAKE FROM D3564-1F)

RELEASED

07.09.04

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	CB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO. D3564	REV. D
MFG. APPR.	PH	SHEET 2 OF 3	
APPROVED	PH	TITLE WEARSHOE	SCALE 1:8
DE APPR.	PH	COPYRIGHT © 2006 BY DART AEROSPACE LTD	
DATE	07.08.21	THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

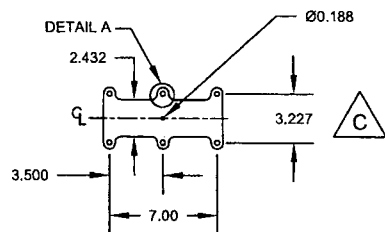
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

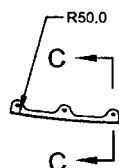
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

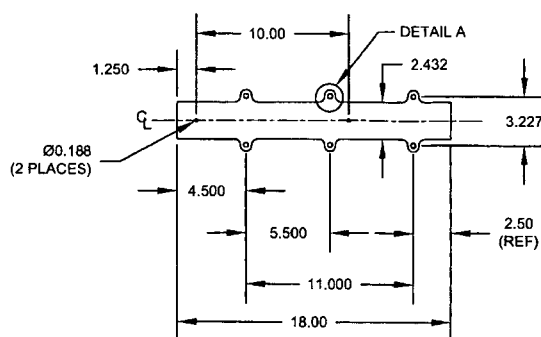
8 7 6 5 4 3 2 1



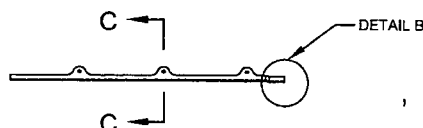
D3564-13F FLAT PATTERN



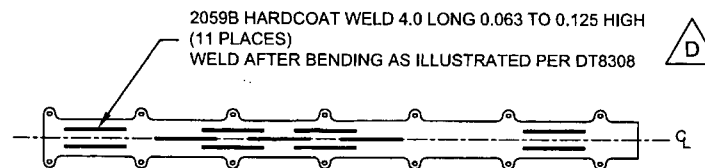
D3564-13 BENDING DETAIL
(MAKE D3564-13 FROM D3564-13F)



D3564-15F FLAT PATTERN



D3564-15 BENDING DETAIL
(MAKE D3564-15 FROM D3564-15F)

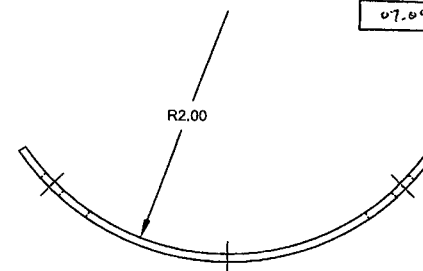


DETAIL D
(D3564-1/3/-9/-11 WELDING DETAIL)

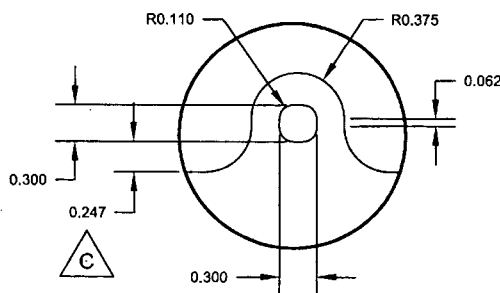
W/O 62234

RELEASED

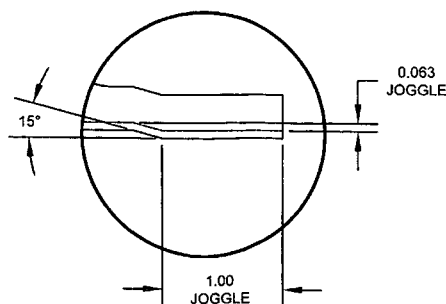
07.09.04



SECTION C-C
SCALE 1:1



DETAIL A
SCALE 1:1



DETAIL B
SCALE 1:1

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	CB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 3 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:1
DATE	07.08.21	COPYRIGHT © 2006 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries